



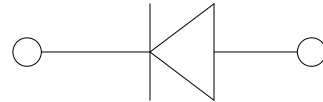
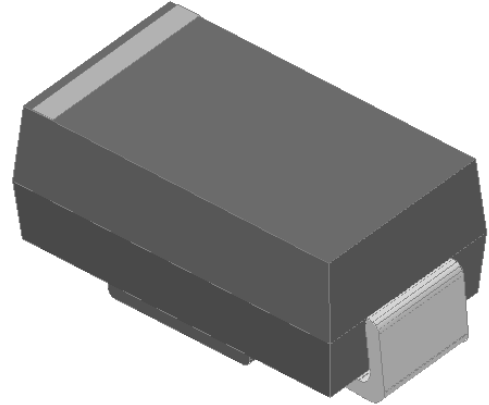
Express recovery diode
Reverse Voltage 50V-600v
Forward current-1A

Features

- Glass passivated chip
- High surge current capability
- Ideal for surface mounted applications
- Low power loss, high efficiency
- Plastic Case Material has UL Flammability

Mechanical Data

- Package: SMA
- Terminals: Tin Plated leads, solderable per Mil-STD-750 Method 2026
- Polarity: As marked
- Molding compound meets UL 94 V-0 flammability rating, ROHS-compliant



Maximum Ratings (Ta=25°C Unless otherwise specified)

Type Number	SYMBOL	ES1					
		A	B	D	G	J	Umit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current at TL = 100°C	$I_{O(AV)}$	1.0					A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	30.0					A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		60.0					A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I^2t	3.7					A²S
Maximum Forward Voltage at 1.0A DC	V_{FM}	0.95		1.3	1.7	V	
Maximum Reverse Current TA = 25°C	IR	5.0					uA
at Rated DC Blocking Voltage TA = 100°C		100.0					
Maximum reverse recovery time	Trr	35.0					ns
Typical Thermal Resistance Between junction and	R_{QJa}	65.0					°C/W
Operating Junction Temperature Range	Tj	-55to+150					°C
Storage Temperature Range	Tstg	-55to+150					°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

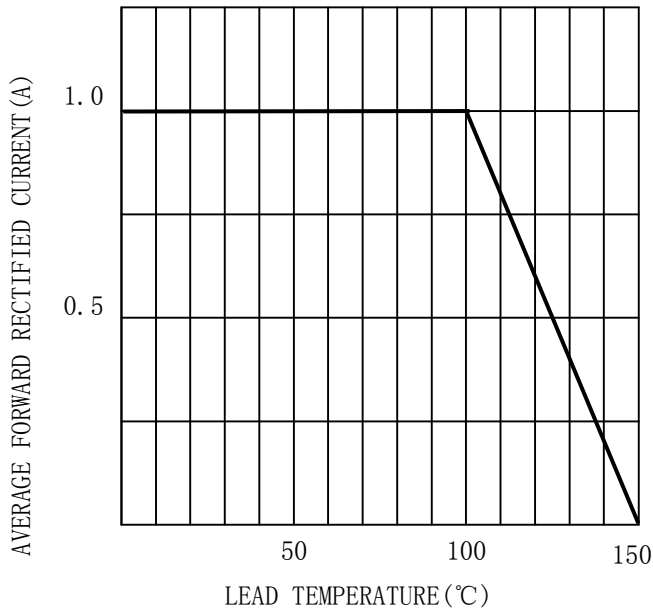


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

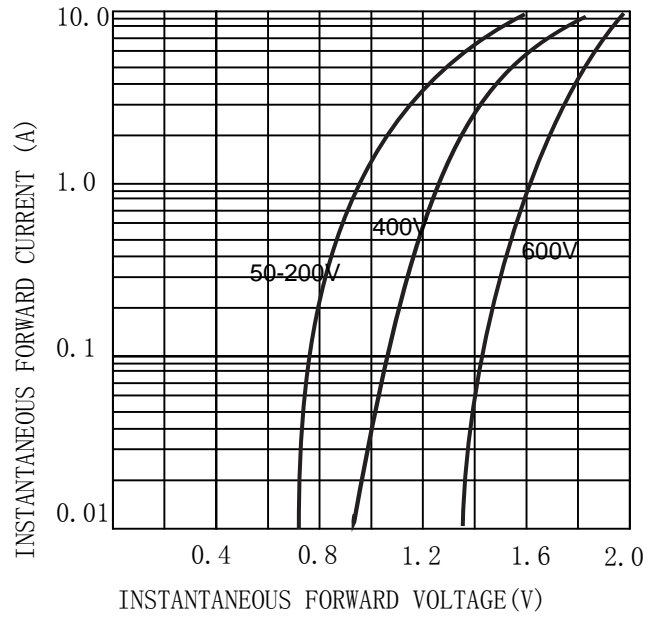


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

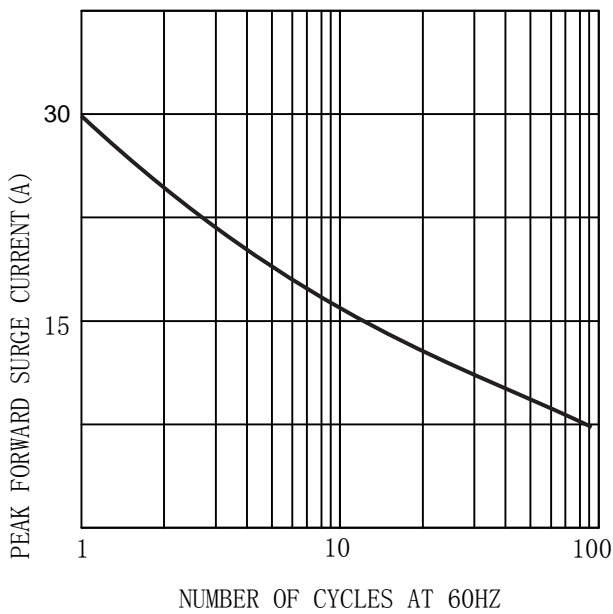
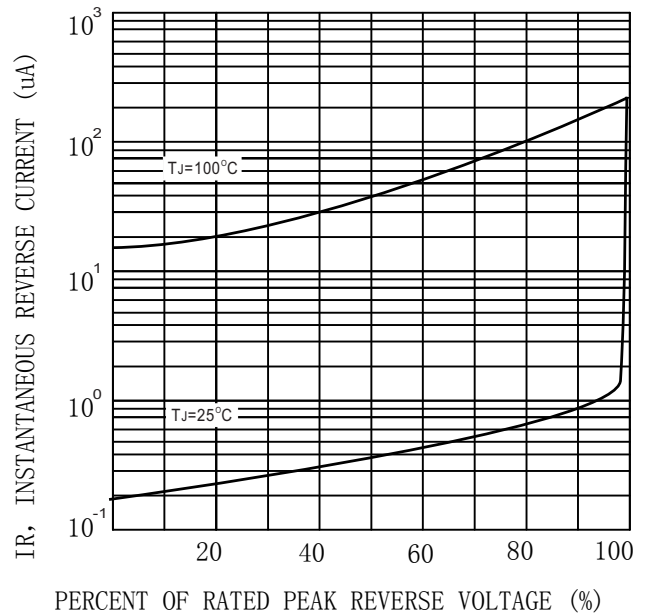



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

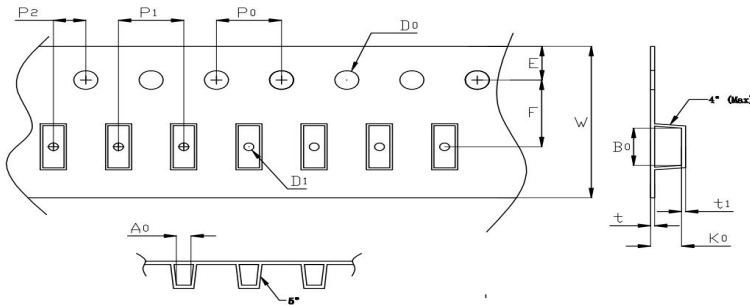
**** = Date Code Marking

ES1* = Marking Code

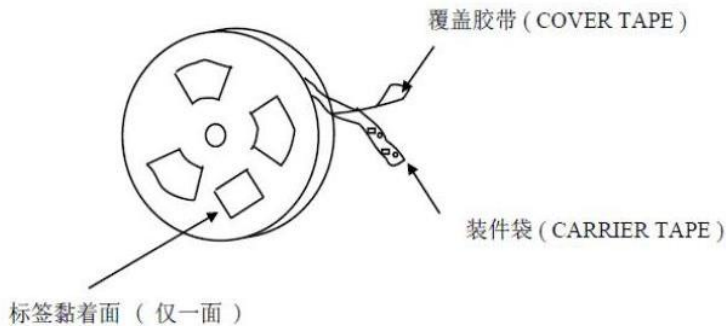
Print according to customer request

PACKING REQUIRMENTS

- Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMA	Anti-static	2.65± 0.10	5.20± 0.10	2.30± 0.10	4.00± 0.10	12.0± 0.10	0.20± 0.05	

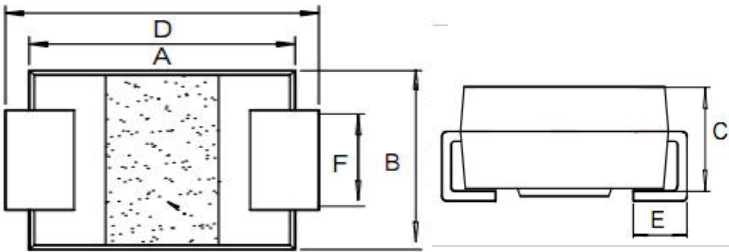


DEVICE TYPE	Tape width	11"Reel			11"Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)	Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMA	12mm	5000	20	100000	5000	18	90000



Outline Dimensions

SMA



SMA				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.16	0.18	4.05	4.65
B	0.09	0.11	2.4	2.8
C	0.07	0.09	1.8	2.3
D	0.18	0.21	4.67	5.27
E	0.04	0.06	1	1.4
F	0.05	0.06	1.2	1.6



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